

IN THE SPECIFICATION:

Please amend paragraph 0017 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0017] The dowel plate has a generally rounded shape that is divided into an ~~embed~~ embedded portion and a slidable portion. The slidable portion is configured to be laterally slidable within the pocket former while the ~~embed~~-embedded portion is configured to be substantially encapsulated or embedded within the second pour such that it is rigidly affixed therewithin after the concrete cures or hardens. Advantageously, the dowel plate is provided in a generally rounded shape in order to minimize safety hazards to construction site equipment and personnel who may be injured by contact with an otherwise rough, exposed edge of a dowel plate having sharp corners or a dowel rod having exposed ends. Furthermore, the dowel plate may preferably be shaped such that a width thereof is at a maximum adjacent the pour joint where the bearing, shear and flexural stresses are greatest.

Please amend paragraph 0018 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0018] The ~~embed~~-embedded portion of the dowel plate is rigidly encapsulated within the second pour and the slidable portion of the dowel plate is slidably disposed within the pocket former such that the dowel plate permits substantially unrestrained relative horizontal movement of the first and second pours in all horizontal directions while restricting relative vertical movement thereof caused by vertical loading. Horizontal movement relative to the pour joint may occur due to uncontrolled shrinkage or contraction of the concrete mixture as water is lost during curing. Vertical loading may be comprised of shear, bearing and flexural loads or any combination thereof caused by settling or swelling of the substrate underlying the first and/or second pours. The vertical loading may also be caused by vehicular or pedestrian traffic passing over the first and second pours.

Please amend paragraph 0019 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0019] The disc dowel system may include a positioner bracket that is mounted to a removable concrete form. The positioner bracket facilitates positioning the pocket former during pouring of the first pour. In certain methods of concrete pavement construction, pour joints are typically formed by using a wooden stud or a sheet metal form as the removable concrete form. Such concrete form is typically staked to the substrate along a desired location of the pour joint. The pocket former is positioned adjacent the concrete form such that the interior compartment is substantially horizontally outwardly extending away from the concrete form. Wet concrete is then poured on a side of the concrete form to create the first pour which encapsulates the pocket former. The concrete form is then removed, exposing a pour face of the pour joint along the first pour with the dowel plate opening formed in the pour face. After the slidable portion of the dowel plate is inserted through the dowel plate opening and into the pocket former, the ~~embed~~ embedded portion remains exposed on an opposite side of the pour joint. Wet concrete is then poured on the opposite side of the pour joint to create the second pour which rigidly encapsulates the ~~embed~~ embedded portion of the dowel plate therewithin.

Please amend paragraph 0020 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0020] The positioner bracket includes a vertically-disposed base flange and a horizontally disposed plate portion that extends from the base flange. The base flange is rigidly attachable to the concrete form by a variety of means such as with fasteners. The plate portion of the positioner bracket is configured to be complementary to the interior compartment such that the positioner bracket may slidably receive the pocket former with a relatively snug fit. In this manner, the pocket former is held in a generally horizontal orientation during pouring of the first pour and prior to removal of the concrete form and positioner bracket after which the slidable portion of the dowel plate may be inserted into the interior compartment with the subsequent pouring of the second pour to encapsulate the ~~embed~~ embedded portion therewithin.

Please amend paragraph 0028 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0028] As can be seen in Figs. 1 and 2, the disc dowel system 10 is comprised of the dowel plate 22 and the pocket former 26. In Fig. 2, a series of the pocket formers 26 are shown encapsulated in the first pour 14 prior to pouring of the second pour 16. The disc dowel system 10 may further include a positioner bracket 62 for positioning the pocket former 26 within the first pour 14 as is illustrated in Figs. 3 through 5 and as will be described in greater detail below. As can be seen in Figs. 1 and 2, the dowel plate 22 has a generally rounded shape that is divided into an ~~embed~~-embedded portion 58 and a slidable portion 60. The ~~embed~~-embedded portion 58 and the slidable portion 60 may be of substantially equal size and shape. As will be explained in greater detail below, the slidable portion 60 is configured to be laterally slidable within the pocket former 26 while the ~~embed~~-embedded portion 58 is configured to be substantially encapsulated within the second pour 16 such that it is rigidly affixed therewithin after the concrete cures or hardens.

Please amend paragraph 0030 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0030] In order to facilitate the transfer of vertical loads across the pour joint 18 between the first pour 14 and the second pour 16, it is contemplated that the dowel plate 22 may be fabricated of a load-bearing material having favorable strength properties. In this regard, the dowel plate 22 may be fabricated from metal plate such as carbon steel plate. A galvanized coating may be included on the dowel plate 22 in order to provide maximum protection of the metal from exposure to concrete which may otherwise result in corrosion for the ~~embed~~-embedded portion 58 of the dowel plate 22. Other coatings for the metal plate are contemplated and may include powder coating and epoxy coating. In addition, the dowel plate 22 may be fabricated from materials other than metal plate such as fiber glass, carbon fiber, Kevlar, or high density polymeric material such as reinforced plastic.

Please amend paragraph 0034 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0034] As can be seen in Fig. 2, the ~~embed~~-embedded portion 58 of the dowel plate 22 is rigidly encapsulated within the second pour 16 and the slidable portion 60 of the dowel plate 22 is slidably disposed within the pocket former 26. In this manner, the dowel plate 22 permits horizontal movement of the first pour 14 relative to the second pour 16 while restricting vertical movement of the first pour 14 relative to the second pour 16. Advantageously, the relative horizontal movement includes movement in a direction perpendicular, movement in a direction parallel to the pour joint 18 as well as horizontal movement in all ranges between the parallel and perpendicular directions.

Please amend paragraph 0041 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0041] Wet concrete is then poured on a side of the concrete form 56 to create the first pour 14 which encapsulates the pocket former 26. The concrete form 56 is then removed, exposing the pour face 20 of the pour joint 18 along the first pour 14 with the dowel plate opening 24 being formed in the pour face 20. After the slidable portion 60 of the dowel plate 22 is inserted through the dowel plate opening 24 and into the pocket former 26, the ~~embed~~-embedded portion 58 remains exposed on an opposite side of the pour joint 18. Wet concrete is then poured on the opposite side of the pour joint 18 to create the second pour 16 which rigidly encapsulates the ~~embed~~-embedded portion 58 of the dowel plate 22 therewithin.

Please amend paragraph 0044 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0044] As can be seen in Fig. 3, the plate portion 68 of the positioner bracket 62 may be sized and configured to be complementary to the interior compartment 42 such that the positioner bracket 62 may slidably receive the pocket former 26 with a relatively snug fit. The pocket former 26 is extended over the plate portion 68 to a depth whereat the straight side 48 is in generally abutting contact with the base flange 64. In such a position, a perimeter of the plate

portion 68 is disposed adjacent to the compartment perimeter 52 of the pocket former 26. In this manner, the pocket former 26 is held in a generally horizontal orientation during pouring of the first pour 14 and prior to removal of the concrete form 56 and positioner bracket 62 after which the slidable portion 60 of the dowel plate 22 may be inserted into the interior compartment 42 with the subsequent pouring of the second pour 16 to encapsulate the ~~embed~~embedded portion 58 therewithin.

Please amend paragraph 0053 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0053] After the concrete form 56 and the positioner bracket 62 are removed and the concrete has cured and hardened, the slidable portion 60 of the dowel plate 22 may be inserted through the dowel plate openings and into the interior compartment 42 of the pocket former 26 leaving the ~~embed~~embedded portion 58 exposed on an opposite side of the pour joint 18. The dowel plate 22 may be sized and configured to be complementary to the interior compartment 42 such that a relatively snug, sliding fit is provided between the dowel plate 22 and the pocket former 26. In this manner, vertical play or looseness between the dowel plate 22 and the interior compartment 42 may be minimized such that vertical loads may be effectively transferred across the pour joint 18 between the first and second pours 14, 16 in order to maintain a common plane therebetween.

Please amend paragraph 0054 of the specification as shown below to clarify the invention and to conform to the claim amendments noted below:

[0054] After the dowel plate 22 is inserted into the pocket former 26, the second pour 16 of concrete is made such that the ~~embed~~embedded portion 58 of the dowel plate 22 is rigidly encapsulated therewithin with the slidable portion 60 being slidably disposed within the pocket former 26. Due to the snug fit between the dowel plate 22 and the pocket former 26, the concrete of the second pour 16 is prevented from seeping into the interior compartment 42 of the pocket former 26 which may otherwise cause the dowel plate 22 to bond to the pocket former 26.

Please amend paragraph 0056 of the specification in the Abstract as shown below to clarify the invention and to conform to the claim amendments noted below:

[0056] Disclosed is a disc dowel system interposed between adjacent first and second concrete pours defining a pour joint therebetween. The disc dowel system comprises a positioner bracket, a pocket former and a dowel plate. The positioner bracket has a vertically disposed base flange and a horizontally disposed plate portion extending therefrom. The base flange is rigidly attachable to a concrete form. The pocket former has a horizontally extending interior compartment with an open, generally straight side and an arch-shaped compartment perimeter extending therefrom. The straight side is aligned with the pour joint. The pocket former is positioned within the first pour by the positioner bracket. The dowel plate has a generally rounded shape with an ~~embed~~embedded portion and a slidable portion. The ~~embed~~embedded portion is rigidly encapsulated within the second pour and the slidable portion is slidably disposed within the pocket former such that the dowel plate permits relative horizontal movement of the first and second pours while restricting relative vertical movement thereof.